46

SEQUENCE LISTING

- (1) GENERAL INFORMATION:
 - (i) APPLICANT: Trustees of the University of Pennsylvania Wilson, James M. Fisher, Krishna J.
 - (ii) TITLE OF INVENTION: Method for Recombinant Adeno-Associated Virus-Directed Gene Therapy
 - (iii) NUMBER OF SEQUENCES: 4
 - (iv) CORRESPONDENCE ADDRESS:
 - (A) ADDRESSEE: Howson and Howson
 - (B) STREET: Spring House Corporate Cntr, PO Box 457
 - (C) CITY: Spring House
 - (D) STATE: Pennsylvania
 - (E) COUNTRY: USA
 - (F) ZIP: 19477
 - (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy disk

 - (B) COMPUTER: IBM PC compatible (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
 - (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER: WO (B) FILING DATE:
 - (C) CLASSIFICATION:
 - (vii) PRIOR APPLICATION DATA: (A) APPLICATION NUMBER: US 08/708,188
 - (B) FILING DATE: 06-SEP-1996
 - (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER: US 08/729,061
 - (B) FILING DATE: 10-OCT-1996
 - (viii) ATTORNEY/AGENT INFORMATION:
- (A) NAME: Kodroff, Cathy A.
 (B) REGISTRATION NUMBER: 33,980
 (C) REFERENCE/DOCKET NUMBER: GNVPN.019CIP2PCT
 - (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: 215-540-9200
 - (B) TELEFAX: 215-540-5818
- (2) INFORMATION FOR SEQ ID NO:1:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10398 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: unknown
 - (ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1: GAATTCGCTA GCATCATCAA TAATATACCT TATTTTGGAT TGAAGCCAAT ATGATAATGA 60 GGGGGTGGAG TTTGTGACGT GGCGCGGGGC GTGGGAACGG GGCGGGTGAC GTAGTAGTGT 120 GGCGGAAGTG TGATGTTGCA AGTGTGGCGG AACACATGTA AGCGACGGAT GTGGCAAAAG 180 TGACGTTTTT GGTGTGCGCC GGTGTACACA GGAAGTGACA ATTTTCGCGC GGTTTTAGGC 240 GGATGTTGTA GTAAATTTGG GCGTAACCGA GTAAGATTTG GCCATTTTCG CGGGAAAACT 300 GAATAAGAGG AAGTGAAATC TGAATAATTT TGTGTTACTC ATAGCGCGTA ATATTTGTCT 360 AGGGAGATCT GCTGCGCGCT CGCTCGCTCA CTGAGGCCGC CCGGGCAAAG CCCGGGCGTC 420 480 GGGCGACCTT TGGTCGCCCG GCCTCAGTGA GCGAGCGAGC GCGCAGAGAG GGAGTGGCCA 540 ACTCCATCAC TAGGGGTTCC TTGTAGTTAA TGATTAACCC GCCATGCTAC TTATCTACAA 600 TTCGAGCTTG CATGCCTGCA GGTCGTTACA TAACTTACGG TAAATGGCCC GCCTGGCTGA CCGCCCAACG ACCCCCGCCC ATTGACGTCA ATAATGACGT ATGTTCCCAT AGTAACGCCA 660 ATAGGGACTT TCCATTGACG TCAATGGGTG GAGTATTTAC GGTAAACTGC CCACTTGGCA 720 780 GTACATCAAG TGTATCATAT GCCAAGTACG CCCCCTATTG ACGTCAATGA CGGTAAATGG CCCGCCTGGC ATTATGCCCA GTACATGACC TTATGGGACT TTCCTACTTG GCAGTACATC 840 TACGTATTAG TCATCGCTAT TACCATGGTG ATGCGGTTTT GGCAGTACAT CAATGGGCGT 900 GGATAGCGGT TTGACTCACG GGGATTTCCA AGTCTCCACC CCATTGACGT CAATGGGAGT 960 TTGTTTTGGC ACCAAAATCA ACGGGACTTT CCAAAATGTC GTAACAACTC CGCCCCATTG 1020 ACGCAAATGG GCGGTAGGCG TGTACGGTGG GAGGTCTATA TAAGCAGAGC TCGTTTAGTG 1080 AACCGTCAGA TCGCCTGGAG ACGCCATCCA CGCTGTTTTG ACCTCCATAG AAGACACCGG 1140 GACCGATCCA GCCTCCGGAC TCTAGAGGAT CCGGTACTCG AGGAACTGAA AAACCAGAAA 1200 GTTAACTGGT AAGTTTAGTC TTTTTGTCTT TTATTTCAGG TCCCGGATCC GGTGGTGGTG 1260 CARATCARAG RACTGCTCCT CAGTGGATGT TGCCTTTACT TCTAGGCCTG TACGGARGTG 1320 TTACTTCTGC TCTAAAAGCT GCGGAATTGT ACCCGCGGCC GCAATTCCCG GGGATCGAAA 1380 1440 GAGCCTGCTA AAGCAAAAAA GAAGTCACCA TGTCGTTTAC TTTGACCAAC AAGAACGTGA TTTTCGTTGC CGGTCTGGGA GGCATTGGTC TGGACACCAG CAAGGAGCTG CTCAAGCGCG 1500 ATCCCGTCGT TTTACAACGT CGTGACTGGG AAAACCCTGG CGTTACCCAA CTTAATCGCC 1560 TTGCAGCACA TCCCCCTTTC GCCAGCTGGC GTAATAGCGA AGAGGCCCGC ACCGATCGCC 1620 CTTCCCAACA GTTGCGCAGC CTGAATGGCG AATGGCGCTT TGCCTGGTTT CCGGCACCAG 1680 AAGCGGTGCC GGAAAGCTGG CTGGAGTGCG ATCTTCCTGA GGCCGATACT GTCGTCGTCC 1740 1800 CCTCAAACTG GCAGATGCAC GGTTACGATG CGCCCATCTA CACCAACGTA ACCTATCCCA TTACGGTCAA TCCGCCGTTT GTTCCCACGG AGAATCCGAC GGGTTGTTAC TCGCTCACAT 1860

TTAATGTTGA	TGAAAGCTGG	CTACAGGAAG	GCCAGACGCG	AATTATTTT	GATGGCGTTA	1920
ACTCGGCGTT	TCATCTGTGG	TGCAACGGGC	GCTGGGTCGG	TTACGGCCAG	GACAGTCGTT	1980
TGCCGTCTGA	ATTTGACCTG	AGCGCATTT	TACGCGCCGG	AGAAAACCGC	CTCGCGGTGA	2040
TGGTGCTGCG	TTGGAGTGAC	GGCAGTTATC	TGGAAGATCA	GGATATGTGG	CGGATGAGCG	2100
GCATTTTCCG	TGACGTCTCG	TTGCTGCATA	AACCGACTAC	ACAAATCAGC	GATTTCCATG	2160
TTGCCACTCG	CTTTAATGAT	GATTTCAGCC	GCGCTGTACT	GGAGGCTGAA	GTTCAGATGT	2220
GCGGCGAGTT	GCGTGACTAC	CTACGGGTAA	CAGTTTCTTT	ATGGCAGGGT	GAAACGCAGG	2280
TCGCCAGCGG	CACCGCGCCT	TTCGGCGGTG	AAATTATCGA	TGAGCGTGGT	GGTTATGCCG	2340
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ATCTCTATCG	TGCGGTGGTT	GAACTGCACA	CCGCCGACGG	CACGCTGATT	GAAGCAGAAG	2460
CCTGCGATGT	CGGTTTCCGC	GAGGTGCGGA	TTGAAAATGG	TCTGCTGCTG	CTGAACGGCA	2520
AGCCGTTGCT	GATTCGAGGC	GTTAACCGTC	ACGAGCATCA	TCCTCTGCAT	GGTCAGGTCA	2580
TGGATGAGCA	GACGATGGTG	CAGGATATCC	TGCTGATGAA	GCAGAACAAC	TTTAACGCCG	2640
TGCGCTGTTC	GCATTATCCG	AACCATCCGC	TGTGGTACAC	GCTGTGCGAC	CGCTACGGCC	2700
TGTATGTGGT	GGATGAAGCC	AATATTGAAA	CCCACGGCAT	GGTGCCAATG	AATCGTCTGA	2760
CCGATGATCC	GCGCTGGCTA	CCGGCGATGA	GCGAACGCGT	AACGCGAATG	GTGCAGCGCG	2820
ATCGTAATCA	CCCGAGTGTG	ATCATCTGGT	CGCTGGGGAA	TGAATCAGGC	CACGGCGCTA	2880
ATCACGACGC	GCTGTATCGC	TGGATCAAAT	CTGTCGATCC	TTCCCGCCCG	GTGCAGTATG	2940
AAGGCGGCGG	AGCCGACACC	ACGGCCACCG	ATATTATTTG	CCCGATGTAC	GCGCGCGTGG	3000
ATGAAGACCA	GCCCTTCCCG	GCTGTGCCGA	AATGGTCCAT	CAAAAAATGG	CTTTCGCTAC	3060
CTGGAGAGAC	GCGCCCGCTG	ATCCTTTGCG	AATACGCCCA	CGCGATGGGT	AACAGTCTTG	3120
GCGGTTTCGC	TAAATACTGG	CAGGCGTTTC	GTCAGTATCC	CCGTTTACÁG	GGCGGCTTCG	3180
TCTGGGACTG	GGTGGATCAG	TCGCTGATTA	AATATGATGA	AAACGGCAAC	CCGTGGTCGG	3240
CTTACGGCGG	TGATTTTGGC	GATACGCCGA	ACGATCGCCA	GTTCTGTATG	AACGGTCTGG	3300
rctttgccga	CCGCACGCCG	CATCCAGCGC	TGACGGAAGC	AAAACACCAG	CAGCAGTTTT	3360
rccagttccg	TTTATCCGGG	CAAACCATCG	AAGTGACCAG	CGAATACCTG	TTCCGTCATA	3420
GCGATAACGA	GCTCCTGCAC	TGGATGGTGG	CGCTGGATGG	TAAGCCGCTG	GCAAGCGGTG	3480
AAGTGCCTCT	GGATGTCGCT	CCACAAGGTA	AACAGTTGAT	TGAACTGCCT	GAACTACCGC	3540
AGCCGGAGAG	CGCCGGGCAA	CTCTGGCTCA	CAGTACGCGT	AGTGCAACCG	AACGCGACCG	3600
CATGGTCAGA	AGCCGGGCAC	ATCAGCGCCT	GGCAGCAGTG	GCGTCTGGCG	GAAAACCTCA	3660
GTGTGACGCT	CCCCGCCGCG	TCCCACGCCA	TCCCGCATCT	GACCACCAGC	GAAATGGATT	3720
TTGCATCGA	GCTGGGTAAT	AAGCGTTGGC	AATTTAACCG	CCAGTCAGGC	TTTCTTTCAC	3780

AGATGTGGAT	TGGCGATAAA	AAACAACTGC	TGACGCCGCT	GCGCGATCAG	TTCACCCGTG	3840
CACCGCTGGA	TAACGACATT	GGCGTAAGTG	AAGCGACCCG	CATTGACCCT	AACGCCTGGG	3900
TCGAACGCTG	GAAGGCGGCG	GGCCATTACC	AGGCCGAAGC	AGCGTTGTTG	CAGTGCACGG	3960
CAGATACACT	TGCTGATGCG	GTGCTGATTA	CGACCGCTCA	CGCGTGGCAG	CATCAGGGGA	4020
AAACCTTATT	TATCAGCCGG	AAAACCTACC	GGATTGATGG	TAGTGGTCAA	ATGGCGATTA	4080
CCGTTGATGT	TGAAGTGGCG	AGCGATACAC	CGCATCCGGC	GCGGATTGGC	CTGAACTGCC	4140
AGCTGGCGCA	GGTAGCAGAG	CGGGTAAACT	GGCTCGGATT	AGGGCCGCAA	GAAAACTATC	4200
CCGACCGCCT	TACTGCCGCC	TGTTTTGACC	GCTGGGATCT	GCCATTGTCA	GACATGTATA	4260
CCCGTACGT	CTTCCCGAGC	GAAAACGGTC	TGCGCTGCGG	GACGCGCGAA	TTGAATTATG	4320
GCCCACACCA	GTGGCGCGGC	GACTTCCAGT	TCAACATCAG	CCGCTACAGT	CAACAGCAAC	4380
IGATGGAAAC	CAGCCATCGC	CATCTGCTGC	ACGCGGAAGA	AGGCACATGG	CTGAATATCG	4440
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TACAGCTGAG	CGCCGGTCGC	TACCATTACC	AGTTGGTCTG	GTGTCAAAAA	TAATAATAAC	4560
CGGGCAGGCC	ATGTCTGCCC	GTATTTCGCG	TAAGGAAATC	CATTATGTAC	TATTTAAAAA	4620
ACACAAACTT	TTGGATGTTC	GGTTTATTCT	TTTTCTTTTA	CTTTTTTATC	ATGGGAGCCT	4680
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TTTCTGACAA	ACTCGGCCTC	GACTCTAGGC	GGCCGCGGG	ATCCAGACAT	GATAAGATAC	4860
ATTGATGAGT	TTGGACAAAC	CACAACTAGA	ATGCAGTGAA	AAAAATGCTT	TATTTGTGAA	4920
ATTTGTGATG	CTATTGCTTT	ATTTGTAACC	ATTATAAGCT	GCAATAAACA	AGTTAACAAC	4980
AACAATTGCA	TTCATTTTAT	GTTTCAGGTT	CAGGGGGAGG	TGTGGGAGGT	TTTTTCGGAT	5040
CCTCTAGAGT	CGAGTAGATA	AGTAGCATGG	CGGGTTAATC	ATTAACTACA	AGGAACCCCT	5100
AGTGATGGAG	TTGGCCACTC	CCTCTCTGCG	CGCTCGCTCG	CTCACTGAGG	CCGGGCGACC	5160
AAAGGTCGCC	CGACGCCCGG	GCTTTGCCCG	GGCGGCCTCA	GTGAGCGAGC	GAGCGCGCAG	5220
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GGCGGTAAAC	ATATTAGGAA	CCAGCCTGTG	ATGCTGGATG	TGACCGAGGA	GCTGAGGCCC	5340
GATCACTTGG	TGCTGGCCTG	CACCCGCGCT	GAGTTTGGCT	CTAGCGATGA	AGATACAGAT	5400
TGAGGTACTG	AAATGTGTGG	GCGTGGCTTA	AGGGTGGGAA	AGAATATATA	AGGTGGGGGT	5460
CTTATGTAGT	TTTGTATCTG	TTTTGCAGCA	GCCGCCGCCG	CCATGAGCAC	CAACTCGTTT	5520
gatggaagca	TTGTGAGCTC	ATATTTGACA	ACGCGCATGC	CCCCATGGGC	CGGGGTGCGT	5580
CAGAATGTGA	TGGGCTCCAG	CATTGATGGT	CGCCCGTCC	TGCCCGCAAA	CTCTACTACC	5640
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GCCGCTGCAG CCACCGCCCG CGGGATTGTG ACTGACTTTG CTTTCCTGAG CCCGCTTGCA 5760 AGCAGTGCAG CTTCCCGTTC ATCCGCCCGC GATGACAAGT TGACGGCTCT TTTGGCACAA 5820 5880 TTGGATTCTT TGACCCGGGA ACTTAATGTC GTTTCTCAGC AGCTGTTGGA TCTGCGCCAG CAGGTTTCTG CCCTGAAGGC TTCCTCCCCT CCCAATGCGG TTTAAAACAT AAATAAAAAA 5940 CCAGACTCTG TTTGGATTTG GATCAAGCAA GTGTCTTGCT GTCTTTATTT AGGGGTTTTG 6000 CGCGCGCGGT AGGCCCGGGA CCAGCGGTCT CGGTCGTTGA GGGTCCTGTG TATTTTTTCC 6060 AGGACGTGGT AAAGGTGACT CTGGATGTTC AGATACATGG GCATAAGCCC GTCTCTGGGG 6120 TGGAGGTAGC ACCACTGCAG AGCTTCATGC TGCGGGGTGG TGTTGTAGAT GATCCAGTCG 6180 TAGCAGGAGC GCTGGGCGTG GTGCCTAAAA ATGTCTTTCA GTAGCAAGCT GATTGCCAGG 6240 GGCAGGCCCT TGGTGTAAGT GTTTACAAAG CGGTTAAGCT GGGATGGGTG CATACGTGGG 6300 GATATGAGAT GCATCTTGGA CTGTATTTTT AGGTTGGCTA TGTTCCCAGC CATATCCCTC 6360 CGGGGATTCA TGTTGTGCAG AACCACCAGC ACAGTGTATC CGGTGCACTT GGGAAATTTG 6420 TCATGTAGCT TAGAAGGAAA TGCGTGGAAG AACTTGGAGA CGCCCTTGTG ACCTCCAAGA 6480 TTTTCCATGC ATTCGTCCAT AATGATGGCA ATGGGCCCAC GGGCGGCGC CTGGGCGAAG 6540 6600 ATATTTCTGG GATCACTAAC GTCATAGTTG TGTTCCAGGA TGAGATCGTC ATAGGCCATT TTTACAAAGC GCGGCCGAG GGTGCCAGAC TGCGGTATAA TGGTTCCATC CGGCCCAGGG 6660 GCGTAGTTAC CCTCACAGAT TTGCATTTCC CACGCTTTGA GTTCAGATGG GGGGATCATG 6720 TCTACCTGCG GGGCGATGAA GAAAACGGTT TCCGGGGTAG GGGAGATCAG CTGGGAAGAA 6780 AGCAGGTTCC. TGAGCAGCTG CGACTTACCG CAGCCGGTGG GCCCGTAAAT CACACCTATT 6840 ACCGGGTGCA ACTGGTAGTT AAGAGAGCTG CAGCTGCCGT CATCCCTGAG CAGGGGGGCC 6900 ACTTCGTTAA GCATGTCCCT GACTCGCATG TTTTCCCTGA CCAAATCCGC CAGAAGGCGC 6960 TCGCCGCCCA GCGATAGCAG TTCTTGCAAG GAAGCAAAGT TTTTCAACGG TTTGAGACCG 7020 TCCGCCGTAG GCATGCTTTT GAGCGTTTGA CCAAGCAGTT CCAGGCGGTC CCACAGCTCG 7080 GTCACCTGCT CTACGGCATC TCGATCCAGC ATATCTCCTC GTTTCGCGGG TTGGGGCGGC 7140 TTTCGCTGTA CGGCAGTAGT CGGTGCTCGT CCAGACGGGC CAGGGTCATG TCTTTCCACG 7200 GGCGCAGGGT CCTCGTCAGC GTAGTCTGGG TCACGGTGAA GGGGTGCGCT CCGGGCTGCG 7260 CGCTGGCCAG GGTGCGCTTG AGGCTGGTCC TGCTGGTGCT GAAGCGCTGC CGGTCTTCGC 7320 CCTGCGCGTC GGCCAGGTAG CATTTGACCA TGGTGTCATA GTCCAGCCCC TCCGCGGCGT 7380 GGCCCTTGGC GCGCAGCTTG CCCTTGGAGG AGGCGCCGCA CGAGGGGCAG TGCAGACTTT 7440 TGAGGGCGTA GAGCTTGGGC GCGAGAAATA CCGATTCCGG GGAGTAGGCA TCCGCGCCGC 7500 AGGCCCGGCA GACGGTCTCG CATTCCACGA GCCAGGTGAG CTCTGGCCGT TCGGGGTCAA 7560 ARACCAGGTT TCCCCCATGC TTTTTGATGC GTTTCTTACC TCTGGTTTCC ATGAGCCGGT 7620

GTCCACGCTC	GGTGACGAAA	AGGCTGTCCG	TGTCCCCGTA	TACAGACTTG	AGAGGCCTGT	7680
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CCGGCAGCGC	TCTGGGTCAT	TTTCGGCGAG	GACCGCTTTC	GCTGGAGCGC	GACGATGATC	7860
GGCCTGTCGC	TTGCGGTATT	CGGAATCTTG	CACGCCCTCG	CTCAAGCCTT	CGTCACTGGT	7920
CCCGCCACCA	AACGTTTCGG	CGAGAAGCAG	GCCATTATCG	CCGGCATGGC	GGCCGACGCG	7980
CTGGGCTACG	TCTTGCTGGC	GTTCGCGACG	CGAGGCTGGA	TGGCCTTCCC	CATTATGATT	8040
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GATGACGACC	ATCAGGGACA	GCTTCAAGGA	TCGCTCGCGG	CTCTTACCAG	CCTAACTTCG	8160
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GAAGCGACTG	CTGCTGCAAA	ACGTCTGCGA	CCTGAGCAAC	AACATGAATG	GTCTTCGGTT	8640
PCCGTGTTTC	GTAAAGTCTG	GAAACGCGGA	AGTCAGCGCC	CTGCACCATT	ATGTTCCGGA	8700
TCTGCATCGC	AGGATGCTGC	TGGCTACCCT	GTGGAACACC	TACATCTGTA	TTAACGAAGC	8760
CTTTCTCAAT	GCTCACGCTG	TAGGTATCTC	AGTTCGGTGT	AGGTCGTTCG	CTCCAAGCTG	8820
GCTGTGTGC	ACGAACCCCC	CGTTCAGCCC	GACCGCTGCG	CCTTATCCGG	TAACTATCGT	8880
CTTGAGTCCA	ACCCGGTAAG	ACACGACTTA	TCGCCACTGG	CAGCAGCCAC	TGGTAACAGG	8940
ATTAGCAGAG	CGAGGTATGT	AGGCGGTGCT	ACAGAGTTCT	TGAAGTGGTG	GCCTAACTAC	9000
GCTACACTA	GAAGGACAGT	ATTTGGTATC	TGCGCTCTGC	TGAAGCCAGT	TACCTTCGGA	9060
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GTTTGCAAGC	AGCAGATTAC	GCGCAGAAAA	AAAGGATCTC	AAGAAGATCC	TTTGATCTTT	9180
TCTACGGGGT	CTGACGCTCA	GTGGAACGAA	AACTCACGTT	AAGGGATTTT	GGTCATGAGA	9240
TTATCAAAAA	GGATCTTCAC	CTAGATCCTT	TTAAATTAAA	AATGAAGTTT	TAAATCAATC	9300
TAAAGTATAT	ATGAGTAAAC	TTGGTCTGAC	AGTTACCAAT	GCTTAATCAG	TGAGGCACCT	9360
ATCTCAGCGA	TCTGTCTATT	TCGTTCATCC	ATAGTTGCCT	GACTCCCCGT	CGTGTAGATA	9420
ACTACGATAC	GGGAGGGCTT	ACCATCTGGC	CCCAGTGCTG	CAATGATACC	GCGAGACCCA	9480
CGCTCACCGG	CTCCAGATTT	ATCAGCAATA	AACCAGCCAG	CCGGAAGGGC	CGAGCGCAGA	9540

52

AGTGGTCCTG	CAACTTTATC	CGCCTCCATC	CAGTCTATTA	ATTGTTGCCG	GGAAGCTAGA	9600
GTAAGTAGTT	CGCCAGTTAA	TAGTTTGCGC	AACGTTGTTG	CCATTGCTGC	AGGCATCGTG	9660
GTGTCACGCT	CGTCGTTTGG	TATGGCTTCA	TTCAGCTCCG	GTTCCCAACG	ATCAAGGCGA	9720
GTTACATGAT	CCCCCATGTT	GTGCAAAAAA	GCGGTTAGCT	CCTTCGGTCC	TCCGATCGTT	9780
GTCAGAAGTA	AGTTGGCCGC	AGTGTTATCA	CTCATGGTTA	TGGCAGCACT	GCATAATTCT	9840
CTTACTGTCA	TGCCATCCGT	AAGATGCTTT	TCTGTGACTG	GTGAGTACTC	AACCAAGTCA	9900
TTCTGAGAAT	AGTGTATGCG	GCGACCGAGT	TGCTCTTGCC	CGGCGTCAAC	ACGGGATAAT	9960
ACCGCGCCAC	ATAGCAGAAC	TTTAAAAGTG	CTCATCATTG	GAAAACGTTC	TTCGGGGCGA	10020
AAACTCTCAA	GGATCTTACC	GCTGTTGAGA	TCCAGTTCGA	TGTAACCCAC	TCGTGCACCC	10080
AACTGATCTT	CAGCATCTTT	TACTTTCACC	AGCGTTTCTG	GGTGAGCAAA	AACAGGAAGG	10140
CAAAATGCCG	CAAAAAAGGG	AATAAGGGCG	ACACGGAAAT	GTTGAATACT	CATACTCTTC	10200
CTTTTTCAAT	ATTATTGAAG	CATTTATCAG	GGTTATTGTC	TCATGAGCGG	ATACATATTT	10260
GAATGTATTT	AGAAAAATAA	ACAAATAGGG	GTTCCGCGCA	CATTTCCCCG	AAAAGTGCCA	10320
CCTGACGTCT	AAGAAACCAT	TATTATCATG	ACATTAACCT	ATAAAAATAG	GCGTATCACG	10380
AGGCCCTTTC	GTCTTCAA					10398

(2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 20 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: unknown
- (ii) MOLECULE TYPE: other nucleic acid
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

CATGGTAATA GCGATGACTA

20

- (2) INFORMATION FOR SEQ ID NO:3:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 20 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: unknown
 - (ii) MOLECULE TYPE: other nucleic acid
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

GCTCTGCTTA TATAGACCTC

53

- (2) INFORMATION FOR SEQ ID NO:4:

 - (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 20 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: unknown
 - (ii) MOLECULE TYPE: other nucleic acid
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

ATAAGCTGCA ATAAACAAGT

20